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CHAPTER FOUR

Dutch Self-Employment between 1980 and 1997

Boris F. Blumberg and Paul M. de Graaf

Between 1945 and the early 1980s, both the absolute and the relative number of self-employed declined in countries with advanced economies. Since the beginning of the 1980s, this downward trend has turned or at least come to a halt in most of these countries. Figure 4.1 shows the development of the Dutch self-employment rate between 1980 and 1996. Since 1983, the share of self-employed among the working populations has grown continuously, and one can speak of a trend reversal. In this chapter, we will investigate Dutch self-employment between 1980 and 1998 along two lines. Our first line looks at more macro-oriented explanations for the recent trend in self-employment, with attention to differences in self-employment between different industrial sectors and social classes. The second line focuses on the micro level, again with an emphasis on the social background and environment. Our main focus is on analyses of the micro level, investigating determinants of entry into and exit out of self-employment.

The chapter is organized as follows. The following section is subdivided into three subsections. The first provides some explanations for the observed trends in self-employment in the Netherlands. In the second subsection, we discuss the sociological and economic literature on the decision to become self-employed and the role social classes play. The third subsection concentrates on the exit decision and discusses some literature on firm survival. Then we provide descriptive analyses for self-employment in the Netherlands in 1985 and 1997 to illustrate the recent trends in Dutch self-employment. In the following section, we describe the datasets used, and the measurement and operationalization of the relevant variables. Section four presents the analysis and results. To analyze entry and exit we apply event-history models, an appropriate advanced technique for investigating life events such as the decision to become self-employed. We also explain the particularities of the statistical models used. The last section provides conclusions.

Explaining Self-Employment Entry and Exit

Favoring and obstructing environmental conditions and characteristics of the potential founder, such as social background, human capital, and personality traits, explain many self-employment trends. The former focuses on the macro level, while the latter attempts to answer the question of why a person becomes self-employed.

Trend Explanations of Self-Employment

A large number of studies have explained developments and changes in self-employment rates at the macro level. Several studies have found a negative relationship between economic development and the self-employment rate (Blau 1987; Loutfi 1991; Schaffner 1993). In more developed countries, people with entrepreneurial capabilities are more likely to become paid managers, since high real wages increase the opportunity costs of self-employment (Lucas 1978). Iyigun and Owen (1998) argue similarly that less people are willing to incur the risk of self-employment if the returns from paid labor are safe and high.

However, in a comparative study of twenty-three OECD countries and thirty-three less developed countries, Acs, Audretsch, and Evans (1992) report that self-employment rates actually rise with economic development, and they hold the major shift of employment opportunities from the capital-intensive manufacturing sectors to the service sector responsible for this trend reversal. Others (e.g., Piore and Sabel 1984; Jensen 1993) see the last quarter of the twentieth century as a phase of creative destruction à la Schumpeter (1950), caused by globalization and the information revolution. The enormous developments in information and communication have reduced the importance of scale economies in many sectors and have even allowed smaller companies to enter markets dominated by large companies. Furthermore, small firms seem to be better at adapting to changing conditions and implementing new technologies. Jovanovic (1993) argues that advances in information technology reduce market coordination costs to close to the level of coordination costs within a hierarchy, and as a result, firm size and diversification declines. Many firms restructured and concentrated on their core businesses by deinvesting and forming independent entities out of their peripheral business units. Another explanation for this trend reversal emphasizes changing consumer preferences in developed countries. First of all, the demand for services increases with an increasing per capita income. The service sector is in turn characterized by a small average firm size and low entry barriers. Second, higher incomes and the multicultural influ-

ences of globalization create individualized and specialized demands, which are better met by many small firms rather than one large firm (Carrol and Hannan 2000). Finally, governments recognized that small firms create the most new jobs and economic growth dynamics. Consequent changes in economic policies, such as more flexible labor laws, lower corporate taxes, and deregulation facilitated the startup of and success chances of new businesses.

Certainly, some of the explanations provided above will have only temporary effects on the self-employment rate. The push for starting up new businesses in deregulated industries will fade, as recent concentration processes (e.g., in the telecommunication sector) already signal. Other explanations, however, point to stable higher levels of self-employment. The information revolution reduced the coordination costs associated with economic transactions and thereby allowed the forming of networks of small and large firms. Further, the more specialized and individualized demand of consumers with high incomes results in a greater diversity of products and services. Consequently, scale economies become less important, and the competitive advantage of larger firms diminishes, allowing smaller firms to operate successfully in these markets.

Why Do People Become Self-Employed?

Many aspects of the macro explanation above refer to specific settings, which facilitate the startup and survival of new businesses. But despite all of these favorable conditions, people who decide to become self-employed are still needed. Therefore, the question "why do people become self-employed" has piqued the interest of many scholars in the social sciences.

Although higher expected earnings are one of the motives for entering self-employment, empirical studies find only weak or no evidence for the hypothesis that the decision to become self-employed is determined by a comparison of the expected lifetime earnings in paid labor and self-employment. For the United Kingdom, Rees and Shah (1986) and Dolton and Makepeace (1990) report that the earnings of self-employed are not significantly different from what they would have earned if they had been in paid labor. De Wit and van Winden (1989) come to the same conclusion in an analysis of Dutch data. Small effects from the earning differential are however reported by Gill (1988) and Taylor (1996). These poor results with respect to the impact of the earning differential are probably caused by uncertainty and bounded rationality (Simon 1957). Individuals will find it hard to recognize and assess all possible business and employment opportunities. Further, the estimation of expected lifetime incomes requires a far-reaching foresight, which

amounts to more than forty years for younger people. If individuals are unable to calculate their future earnings, their decision to become self-employed is more likely to depend on an assessment of their current success chances. Those who believe themselves to possess the resources and capabilities to become self-employed successfully will enter self-employment. The others will prefer a paid job, or will rely on unemployment benefits if no job is available.

Penrose (1959) identified four qualities of a successful entrepreneur: ambition, fund-raising ingenuity, versatility, and good judgment. Especially in psychology, researchers have tried to identify personal traits that distinguish the entrepreneur from the employee. Traits that have been investigated include the need for achievement (McClelland 1961), locus of control (Rotter 1966), and risk aversion. However, partly due to research design deficiencies, such as selection bias, ill-defined populations, small samples, and missing control groups, it is not clear whether these traits identify entrepreneurs or successful people in general (see, e.g., Amit, Glosten, and Muller 1993). Furthermore, one can question the direction of the causal relationship, since the difficult start conditions of new businesses may force an entrepreneur to show high levels of achievement (Sandberg 1986).

In sociological as well as economic studies on self-employment, human capital is often used to explain self-employment trends. The general argument for the influence of human capital on entry into self-employment is that higher human capital results in higher productivity, and consequently higher profits and better success chances. General education and years of working experiences are commonly used indicators for human capital. However, different empirical studies sketch an unclear picture of the relationship between such indicators and entry into self-employment. Most studies report nonsignificant effects for education (see, e.g., Carroll and Mosakowski 1987; Taylor 1996; de Wit and van Winden 1989). An exception is Rees and Shah (1986), who find that a higher education increases the chance to become self-employed. With respect to work experience, the picture is even fuzzier. Evans and Leighton (1989) as well as de Wit and van Winden (1989) find a negative relation, while Carroll and Mosakowski report a nonsignificant effect, and Dolton and Makepeace (1990) and Evans and Jovanovic (1989) observe a positive relationship.

There are several reasons for these inconsistent results. First, a higher education and more work experience are partly endogenous with self-employment. The decision to continue schooling or to obtain more work experience postpones the decision to become self-employed. Second, one can doubt whether formal education teaches the skills crucial for successful self-employment. Hence, human capital obtained through education

does not necessarily increase one's productivity as an entrepreneur. Third, the self-employed are a rather heterogeneous group. Uncle Tom, who keeps the gardens of our college friend Ernesto, who inherited a manufacturing firm, and our niece Tosca, who started a fast-growing software company after graduating, are all called self-employed. Hence, an analysis of entry into self-employment should account for different class departure points.

The self-employment of one's parents is the factor that is most strongly correlated with entry into self-employment (see, e.g., Blanchflower and Oswald 1998; Blau and Duncan 1967; Carroll and Mosakowski 1987; Luijkx and Ganzeboom 1989; Taylor 1996; de Wit and van Winden 1989), even if one excludes those individuals who took over a family business (Blumberg and Pfann 2001). The strong effect of the parents' employment status points to the issue of intergenerational mobility.

Social class–oriented research on self-employment investigates the intergenerational mobility flows into and out of self-employment (see, e.g., Goldthrope 1980; Hout 1983), as well as the social mobility within an individual's career. Empirical studies show that entry into self-employment is positively related with the father's socioeconomic status (Mayer and Carroll 1987). Two mechanisms explain the movements into self-employment from a social mobility perspective. First, it is intriguing how much larger the chance to become self-employed is for children with self-employed parents. In general, this fact is explained by socialization and the inheritance of capital. Children of the self-employed obtain during their upbringing values and skills that are useful for self-employment. Further, they might get more direct and indirect support when they decide to become self-employed themselves. One can easily imagine that the son of a family that has been employed in the civil service for generations will meet more reluctance from his parents than a daughter of a successful self-made man. On average, the self-employed have an income advantage compared with people in paid labor. For the Netherlands, one can state that this advantage is around 40 percent in the 1980s and 1990s (CBS 1999). Thus, children with self-employed parents are likely to inherit more and are also more able to obtain financial support from their family to start a business. Finally, some of the younger self-employed enter this class by taking over the family business. Given that the survival chances of an established business are much higher than those of a new business (see, e.g., Freeman, Carroll and Hannan 1983; Preisendörfer and Voss 1990), those who take over a family business enter self-employment with much less risk than those who start from scratch.

Self-employment can also be a route to upward mobility. Often people are restrained from moving up the social ladder because they lack the formal educational requirements for better-paid jobs or are confronted

with prejudices concerning their social and ethnic origin. For these groups, self-employment provides an opportunity to achieve a higher socioeconomic status. Recent empirical studies that investigate self-employment among ethnic minorities support this argument. Bates (1997) investigates self-employment among immigrants in the United States. He concludes that Korean and Chinese immigrants in particular cannot fully utilize their human and social capital on the labor market and therefore choose self-employment. However, as Fairlie and Meyer (1996) have pointed out, one should recognize that the self-employment rates of ethnic minorities differ considerably, and African Americans, for example, are far less likely to enter self-employment.

Exit from Self-Employment

Understanding the complete dynamics of self-employment requires more than just investigating who chooses self-employment and why. In addition to entry movements, we need to analyze exit movements. Thus, the other question is: who leaves self-employment, and for what reasons? The two most important reasons for leaving self-employment are: (1) the self-employed stop because their businesses are economically not able to survive, or even go bankrupt, and (2) the self-employed find better opportunities on the labor market and switch to paid work.

Most economic and sociological studies investigate exit from self-employment from the firm's perspective, and not from the self-employed individual's perspective. These studies address the survival chances of firms and thereby focus at least implicitly on the first reason for leaving self-employment. Brüderl, Preisendörfer, and Ziegler (1992) use an approach that combines human capital theory and organizational ecology to explain the survival rates of young business firms in Upper Bavaria (Germany). Their main conclusion is that individuals with higher human capital have better survival chances. Thus, the straight argument that high levels of human capital increase productivity and survival chances holds. Additionally, selection effects are present; individuals with higher levels of human capital start larger businesses with higher a priori survival chances (see, e.g., Hannan and Freeman 1989).

Self-Employment in the Netherlands

In the Dutch laws and regulations, definitions for entrepreneur, self-employed, and employee differ largely due to the different objectives specific laws have. For example, the definition for self-employment in social security laws is narrower than in tax regulations. The distinction

between self-employed and dependently employed is especially troublesome for the estimated 100,000 self-employed without personnel, who are predominately active in the sectors of construction, business, and personal services. Statistics Netherlands uses a rather broad definition of self-employed, which includes the self-employed without employees, as well as owner/managers of incorporated and limited companies. Our descriptive analyses are based on data from Statistics Netherlands and use their broad definition. The later analyses of self-employment determinants make use of the Family Survey Dutch Population, in which the respondents self-reported their employment status, presumably also by applying a rather broad definition of self-employment.

In the Netherlands, the long-term trend of a declining self-employment rate has been reversed as in many other Western countries, such as Belgium, Germany, Ireland, Italy, Spain, and the United Kingdom (Luber and Gangl 1997). In the Netherlands, the nonagricultural self-employment rate started to rise in 1980 but dropped in the late 1980s. Since 1990, the self-employment rate has again increased (see fig. 4.1). However, it must be noted that the trend differs between industrial sectors. Table 4.1 gives an overview of the self-employment rates in different sectors for men and women in 1985 and 1997. Between 1985 and 1997, the overall self-employment rate for men increased from 10.6 percent to 12.3 percent, and for women from 4.0 percent to 8.3 percent. The table shows clearly that the increase takes place in specific sectors, while other sectors have retained a declining rate. For men, we observe a sharp increase in self-employment in the sectors of manufacturing, construction, transport, education, and other services. The sectors of retail, hotel and restaurants, and health and agriculture show declining male self-employment. For women, we observe a rising self-employment rate between 1985 and 1997 for all sectors except hotels and restaurants. However, the rise is relatively small in the sectors of retail, business services, and health.

In the Netherlands, more than three hundred different subsidies are offered to foster entrepreneurship. However, it should be noted that the vast majority of these subsidies were implemented in the late 1990s and therefore do not affect most of the self-employment decisions analyzed in this chapter. The Dutch government distinguishes six policy areas that affect entrepreneurship: (1) administrative requirements; (2) tax policy; (3) the Bankruptcy Act; (4) startup costs; (5) governance structure; and (6) infrastructure (Ministry of Economic Affairs 2002). Until 2001, registering a business required a certificate for entrepreneurship. Although this law was not enforced very strictly, as it was common practice to register the business if the business starter promised to obtain the certificate in the future, it can still be considered as a major obstacle to the

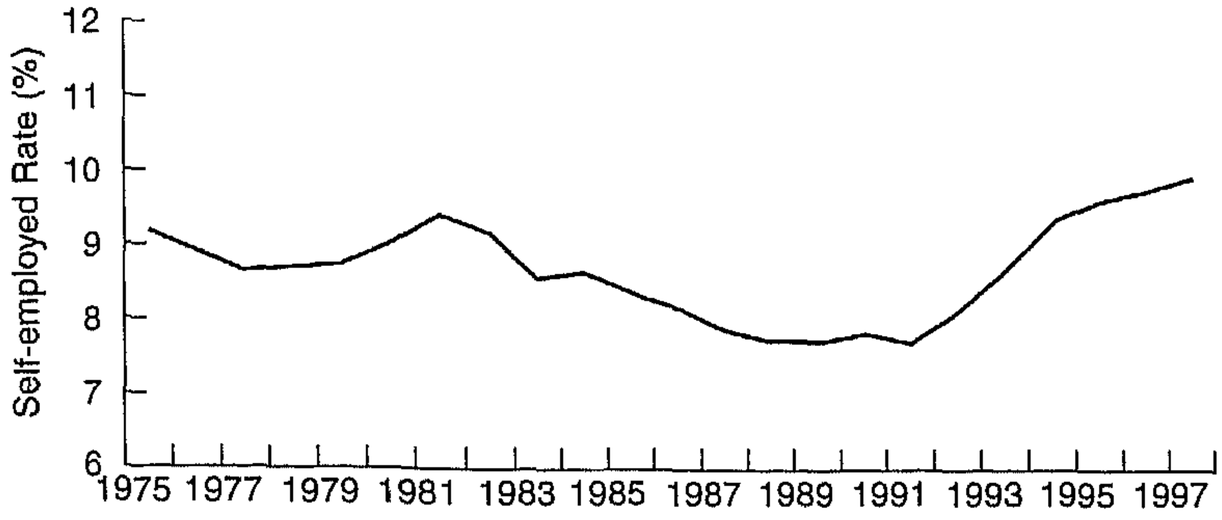

Figure 4.1: Self-Employment Rate between 1975 and 1997 (Excluding Agriculture) in the Netherlands

self-employment of less educated persons. Starting a business also involved other administrative obligations and expenses, depending on the sector. In more regulated sectors, these burdens are considerable. For example, the administrative costs for a starting painter are about € 1,000, and for an electrician around € 3,000 (Zevenbergen 2000). Concerning the nominal and effective corporate tax tariffs (35 percent and 30 percent in 1999), the Netherlands occupies a middle position in Europe. The

TABLE 4.1
Self-Employment Rates by Industrial Sector and Sex in the Netherlands, 1985 and 1997 (in percent)

	1985		*1997*	
Industrial sector	*Men*	*Women*	*Men*	*Women*
Manufacturing	2.1	1.8	4.1	5.5
Construction	7.1	1.9	13.4	8.3
Retail and wholesale	20.1	6.9	15.9	8.2
Hotels and restaurants	37.5	11.5	18.9	9.8
Transport and communication	3.0	1.5	6.5	2.3
Financial services	4.1	0.8	7.2	1.7
Business services	15.6	8.6	18.7	9.1
Education	2.3	1.0	4.4	3.9
Health	16.7	3.5	12.5	4.1
Other services	3.1	3.3	6.6	12.4
Agriculture	58.9	8.8	56.2	36.1
Total, including agriculture	10.6	4.0	12.3	8.3
Total, excluding agriculture	7.8	3.9	10.5	7.7

Source: Labor Force Surveys Statistics Netherlands, AKT85 and EBB97.

Dutch Bankruptcy Act is rather strict compared with other countries, and the possibility to suspend payments (surséance) does not work well, since 73 percent of such arrangements still end in bankruptcy.

The Netherlands is ahead of even other advanced economies with respect to the usage of information technology. Recent figures show that in the Netherlands there are 201 personal computers per 1,000 inhabitants, as compared to 134 in France or 165 in Germany (UNESCO 1998). The only European country with more personal computers is Switzerland (348 computers per 1,000 inhabitants). The information revolution has led to an increase in self-employment because it creates an additional demand for professional services, which is efficiently done in smaller firms. Furthermore, developments in the information and communication technology reduced coordination costs. Thus, it became viable to outsource business activities that can be easily separated from the core process. Forming independent business entities for such separable activities has the advantage of enhanced monitoring and control through higher financial transparency, and higher flexibility with respect to changes in market demand. For example, the rise in self-employment in financial services can be ascribed to the fact that many banks and insurance companies outsourced the selling of their products to independent intermediaries. These developments have even seeped through to the manufacturing sector. In this sector, the rise in self-employment takes place in those industries related to information and communication technology, while other, more traditional industries, such as metal or food, experience lower levels of self-employment. Higher self-employment rates in the educational sector seem to mirror the growing importance of lifetime learning, and the derived demand for professional training. In sectors where labor costs form a large part of total expenditures (e.g., construction), firms have an incentive to transfer risks and payments associated with social security to their self-employed subcontractors, especially if demand is seasonal, and work disabilities are likely. The changes in the self-employment rates in retail and hotel and restaurants can be ascribed to sector-specific changes in the economic organization of labor and institutions. Vertical or horizontal integration of smaller businesses allows the realization of economies of scale and thereby reduces the self-employment rate. The strong concentration process in retailing is easily visible if one walks down the main shopping streets of any Dutch city. Shops owned by local businesspeople have decreased enormously and been replaced by chain retailers, who realize scale advantages in marketing and procurement. Similar processes can also be observed in the hotel and restaurant sector, where large hotel chains have taken over formerly privately owned hotels, and breweries have expanded by opening pubs and restaurants. Finally, the role of agriculture has diminished in the

TABLE 4.2
Self-Employment Rates by Educational Attainment and Sex in the Netherlands, 1985 and 1997, Excluding Agriculture (in percent)

	1985		*1997*	
Educational level	*Men*	*Women*	*Men*	*Women*
1ab: elementary	5.8	3.1	9.0	6.6
1c: lower vocational	4.1	3.0	7.0	6.5
2a: intermediate vocational	11.6	4.9	11.4	6.9
2b: intermediate general	5.1	1.6	8.7	5.6
2c: higher general	4.6	1.4	9.3	5.2
3a: higher vocational	5.5	5.1	10.2	8.4
3b: university	11.1	8.6	15.8	10.2

Source: Labor Force Surveys Statistics Netherlands, AKT85 and EBB97.

Dutch economy. Cost-efficient production requires large investments in capital goods, which only large farms can afford. Furthermore, subsidies and legislation from the European Council seem to favor larger farms.

Table 4.2 shows how the Dutch self-employment rates differ between educational levels for men and women in 1985 and 1997. The educational level is ranked according to the CASMIN schema (Müller et al. 1989) applied to the Dutch educational system (de Graaf and Ganzeboom 1993). Overall, it can be stated that self-employment increased across all educational levels for both men and women between 1985 and 1997. As mentioned before, it is unclear to what extent formal education teaches entrepreneurial skills. Therefore, a relationship between educational level and self-employment rates is neither expected nor found. People with a university degree have above-average rates of self-employment. This is certainly partly caused by self-employment in free professions, such as doctors and lawyers, which require a university degree. Furthermore, one could argue that vocational education is likely to provide more practical skills close to the actual tasks done on the job. Yet only individuals with an intermediate vocational education show higher self-employment rates, not people with lower and higher vocational education. However, the narrowing gap between the total self-employment rate and the rate for higher vocational education might indicate that individuals with vocational education are better equipped to enter self-employment.

The concept of social classes as an explanation for entries into and exits out of self-employment plays an important role in this paper. We apply multivariate analyses to elucidate movements into and out of self-employment by looking at the previous social class of the self-employed

TABLE 4.3
Self-Employment Rates by Skill Level and Sex in the Netherlands, 1985 and 1997 (in percent)

	1985		*1997*	
Skill level	*Men*	*Women*	*Men*	*Women*
Professionals and managers	8.2	5.8	13.4	10.7
Skilled	9.3	4.5	9.8	4.7
Unskilled	2.5	0.5	4.3	7.0

Source: Labor Force Surveys Statistics Netherlands, AKT85 and EBB97.

and the father's social class. In social class research, the self-employed are usually treated as distinct social classes (Erikson and Goldthorpe 1992). Applying a social mobility perspective to investigate self-employment requires that social classes be defined independently from employment status. Therefore, we use a collapsed schema of three classes: professional/managerial, skilled, and unskilled. In each of these three classes one can be either dependently employed or self-employed (see below for more details on the definitions of the three classes).

Table 4.3 shows the self-employment rates with respect to social classes in 1985 and 1997. The general rise of the self-employment rate since 1985 is caused by increased self-employment in the professional/managerial and the unskilled classes. In the unskilled class, the female self-employment rate rose higher than the male rate in 1997. However, in the two other classes, the self-employment rates of men still exceed those of women, and the gap has even increased in the investigated period. A look at the distribution of self-employment (upper panel of table 4.4) over the different classes reveals some interesting shifts. In 1985 most self-employed men and women were self-employed in the skilled class, but in 1997 the dominant class for self-employed people was the professional/managerial class. Comparing the upper and lower panels of table 4.4, which show the class distribution for self-employed and for paid employees, allows us to infer the heterogeneity of self-employment and paid labor. Between 1985 and 1997, the largest class changed from skilled to professional/managerial for people in paid labor as well. Furthermore, we observe that the share of the unskilled class is much larger for paid employees than for self-employed. This finding is in line with the lower self-employment among less educated people and indicates that entering self-employment often requires a minimum level of education and skills.

We complete our sketch of Dutch self-employment with a look at the three most common occupations of self-employed men and women in

TABLE 4.4
Skill Level by Employment Status and Sex in the Netherlands, 1985 and 1997 (in percent)

	1985		*1997*	
Skill level	*Men*	*Women*	*Men*	*Women*
Self-employed				
Professionals and managers	33.5	36.8	55.5	48.6
Skilled	60.9	60.1	38.1	30.5
Unskilled	5.6	3.1	6.4	20.9
Paid employees				
Professionals and managers	31.7	24.2	42.1	31.1
Skilled	49.8	51.9	41.0	47.7
Unskilled	18.6	23.9	16.8	21.2

Source: Labor Force Surveys Statistics Netherlands, AKT85 and EBB97.

the three different social classes for 1985 and 1997. Overall, we observe that in 1997 occupations related to business and personal services, such as insurance and real estate agents, commercial, and care professions enter the top three occupations in all three classes. In the skilled and unskilled class, more traditional professions, such as tailor, hair stylist, and hotel or restaurant owner fall behind. This mirrors the increasing self-employment in all service sectors. In 1997 technicians are the largest occupation in the professional/managerial class, reflecting the rising importance of the information, communication and technology sector, where many small (consulting) firms were founded in the last decade of the twentieth century. Furthermore, construction workers are the most common occupation in the skilled class. For both sexes, medical professions form a large group in the professional/managerial class in 1985 and 1997, and for women this also holds for artists. In the skilled class, male and female shopkeepers belong in both years to the top three occupations. Differences between the sexes can be observed in the unskilled class. In 1985 and in 1997, the most popular male unskilled occupations are drivers and janitors, while female unskilled self-employed have mostly administrative occupations.

DATA, MODELS, AND MEASUREMENT

We use data from two retrospective life course surveys, the Family Survey Dutch Population 1992 (FSDP92; Ultee and Ganzeboom 1992) and the Family Survey Dutch Population 1998 (FSDP98; De Graaf et al.

2002). The design of the two surveys is similar: primary respondents are a sample of the Dutch population between 21 and 64 years old (FSDP92) or between 18 and 70 years old (FSDP98). Both samples include an oversample of people living with a spouse, married or unmarried. Primary respondents and their spouses were interviewed with similar (FSDP92) or equal (FSDP98) questionnaires. We use both primary respondents and their spouses as respondents in our analysis, which brings the total number of cases to 3,827 (1,800 in 1992 and 2,027 in 1998).

Respondents and their spouses were interviewed on many aspects of their life course, including their residential, demographic, educational, and occupational careers. This design allows us to study the complete employment careers of the respondents in our two samples, but for comparative purposes we will also present separate analyses on the careers of persons who were between 18 and 60 years old in the period since 1980. In these latter models, we observe twelve years of employment history for respondents interviewed in 1992, and eighteen years of employment history of respondents interviewed in 1998. Given the age distributions of the sample in the survey years, we have a bias toward younger age groups in earlier years. This is especially the case in the analyses for the whole sample, when we extend our analyses to employment histories during the 1960s and 1970s. For this period, we have only observations of people younger than 35–45 years. In addition, we limited our sample to people who do not have an agricultural occupation or who worked in the agricultural industry. In our analysis, we have data on 3,777 respondents who were at risk to enter self-employment; 326 of them entered self-employed at least one time. In the period since 1980, 3,677 respondents were at risk to enter self-employment, 203 of whom experienced a transition to self-employment once or more.

Altogether, we observe 350 entries into self-employment, 177 of which entered into professional/managerial self-employment, 132 into skilled self-employment, and 27 into unskilled self-employment (for 14 cases, there is no valid information on the occupational level of the self-employment). For the period since 1980, these numbers are somewhat lower: 209 total entries into self-employment (118, 76, and 8 transitions, respectively, and 7 missing information on occupational level). Furthermore, we have data on 160 exits from self-employment, of which 105 are observed in the period since 1980.

We use discrete event history analysis (Allison 1984; Yamaguchi 1991) to estimate competing risk models of determinants of entry into self-employment and exit from self-unemployment. Discrete time models allow the use of covariates that change over time, are flexible in the type of duration dependency, and require a data matrix, which is easy to construct (i.e., a person-period file). We have constructed a person-year file,

in which for all respondents the variables are observed for every observed year (i.e., the situation on January). Logistic regression models can be used to estimate the effects on entry into self-employment and exit from self-employment. We present three models:

1. A simple logistic regression model in which the dependent variable is the entry into self-employment. At risk are both those who were employed and those without jobs. This last group includes unemployed and disabled persons, persons in education, and housewives. Data limitations prevent these groups from being distinguished in the analysis.
2. A multinomial logistic regression model in which the entry into self-employment is divided in two categories: professional/managerial and skilled occupation. Lacking data prevent transitions to self-employed in unskilled jobs from being analyzed. These events will be treated as censored cases in the analysis. This is a competing risk model in which the third category (no entry into self-employment) is the reference category. The risk group is the same as in the first model.
3. A simple logistic regression model in which the dependent variable is exit out of self-employment. At risk are people in self-employed jobs in the year preceding the event.

Determinants of entry into self-employment and exit from self-employment are:

Age and age squared	Age is transformed into (age-18). Age is a time-dependent covariate.
Survey 1998	A dummy variable with 0 = FSDP92 and 1 = FSDP98.
Sex	A dummy variable with 0 = female and 1 = male.
Education	A set of three dummy variables: low education (CASMIN 1abc), medium education (CASMIN 2abc), and high education (CASMIN 3ab). The reference group is low education.
Origin status	A set of four time-dependent dummy variables: an employed job in EGP class I or II (labeled professionals/managers), an employed job in EGP class IIIa, IV, V, VI, or VIIa (labeled skilled work), an employed job in EGP class IIIb or VIIb (labeled unskilled work), or no job (Erikson and Goldthorpe 1992). The group "no job" includes persons who are out of the labor market (more than 95 percent) and persons who are unemployed. The reference group is the unskilled class.

Industry	The industrial sectors are coded in five groups: mining/manufacturing, construction, traditional services (including hotels and trade), business services (including finance, transport, communication), and other services. Mining/manufacturing is the reference category.
Spouse information	We have complete information on the labor market history of the current spouse (married or unmarried). We do not have information on previous spouses. A set of four time-dependent dummies is created: spouse has no job, spouse is employed, spouse is self-employed, and no spouse information. The category "no spouse information" includes episodes of respondents who are single (largest group) and respondents who entered self-employment while living with a former spouse. The reference group is "spouse has no job."
Father's class	Father's class has the same categories as the respondent's.
Origin status	Professionals/managers, skilled work, and unskilled work based on the EGP class scheme. Father's class is based on the occupational title of the job he had at respondent's age 15. Unskilled work is the reference category.
Father's self-employment	An indicator whether the respondent's father was self-employed or not at respondent's age 15.
Unemployment rate	Before the 1970s the percentage of the labor force population unemployed in the Netherlands was less than 2 percent, but in the 1970s it increased to double-digit figures. The unemployment rate decreased from 13.2 to 6.0 percent between 1980 and 1998.
Solo self-employment	One additional variable in the analysis of transition out of self-employment will be an indicator of solo self-employment. The self-employed with employees have value 0; those without have value 1.
Personality	One of the two surveys (FSDP98) includes information on the big five personality traits: extraversion, agreeableness, conscientiousness, emotional stability, and openness or creativity (Eysenck 1947). These personality dimensions are self-assessed by the respondents (five items for each dimension, according to the procedure developed by Gerris [1998]).

Although the data include information on previous self-employment or previous unemployment, effects of these interesting aspects of the work career could not be included in the analysis due to very small numbers of individuals who reported such previous events. The person-period file is constructed on a yearly base and gives the variables on January first of each year. In the models, some variables are lagged one year, ensuring the correct time order of independent variables and transitions. These lagged variables are age, origin status, industry, and spouse information.

Analysis and Results

In this section we first analyze entry into self-employment, and then exit from self-employment, with event history models. The analysis of both movements is organized as follows. First, we inspect the Kaplan-Meier survival functions, and then we proceed with an event history analysis of entries and exits, which includes covariates on the characteristics of the respondent, the respondent's social background, environment and industries. Then we extend these models with an indicator for the macro-economic conditions (i.e., the national unemployment rate and the psychological characteristics of the respondents). Finally, we conduct a competing risk event-history analysis for entries into the three distinct categories of self-employment.

Entry into Self-Employment

In the following analyses we estimate the time it takes to become self-employed. The estimation of this time requires the definition of a starting and an end point. The end point is naturally when someone becomes self-employed. The starting point is defined by the first time a person becomes at risk (i.e., could become self-employed). Our starting point is the end of education. All people who have a paid job, are unemployed, or are out of the labor force are at risk. Persons who are still in education and switch directly from being in education to self-employment are not considered in the analysis. First, we inspected the Kaplan-Meier survival function for all entries into self-employment. The relative number of entries into self-employment is rather constant for the first twenty-five years of the labor market career, and only in the last third of a career do movements into self-employment occur less frequently.

Table 4.5 shows the results of an event-history analysis for entries into self-employment. In the first model, only the 209 entries between 1980 and 1998 are considered. In the second model, entries prior to 1980 are also included. The number of entries thus increases to 350. We include

TABLE 4.5
Effects on Entry into Self-Employment in the Netherlands[a]

	Entries since 1980	*All entries*
Respondent's characteristics		
Male	0.313~	0.428**
Age	0.163**	0.133**
Age (squared)	−0.005**	−0.004**
Education: medium[b]	0.592**	0.509**
Education: high[b]	0.816**	0.656**
Origin: professional manager[c]	0.087	−0.203
Origin: skilled[c]	0.101	−0.067
Origin: unemployed/not in labor force[c]	−0.541*	−0.538*
Social background and environment		
Father professional/manager[d]	0.352~	0.428**
Father skilled[d]	0.167	0.049
Father self-employed	0.304*	0.544**
Spouse: employed in paid labor[e]	0.261	0.218
Spouse: self-employed[e]	1.027*	1.148**
No Spouse[e]	0.505~	0.342*
Industrial sector		
Construction[f]	0.886*	0.836**
Traditional services[f]	0.932**	1.062**
Business services[f]	−0.459	0.023
Other services[f]	−0.396	−0.185
Business cycle		
Unemployment rate	−0.037	−0.005
Control variable		
Survey 1998	−0.139	−0.459**
Intercept	−7.673**	−7.361**
Number of events	209	350
Number of cases (persons * years)	50,239	85,059
−2 Log Likelihood	2,586	4,339
Chi^2	122.6	205.1
Degrees of freedom[g]	25	25

Source: Family Survey Dutch Population, 1992/93 and 1998.
[a] Logistic regression; reference category is no entry into self-employment
[b] Reference category: low education
[c] Reference category: unskilled
[d] Reference category: unskilled
[e] Reference category: spouse no job
[f] Reference category: manufacturing industry
[g] The effects of indicator variables representing a missing value on respondent's education, skill level, father's skill level and self-employment, and industrial sector are included in the model but are not reported.
** $p < 0.01$ * $p < 0.05$ ~ $p < 0.10$

the second model to check whether the effects found for entries between 1980 and 1998 are stable. This is necessary since the number of observed entries (209) is rather small given the number of effects to be estimated. Although some coefficients change in magnitude, the overall picture does not differ for all entries and entries since 1980.

What determines entry into self-employment? First of all, males are more likely to enter self-employment. The significant coefficients of age and age squared indicate a ∩-shaped relationship between age and the chance to become self-employed. This result reflects the age dependency of an individual's productivity. On the one hand, productivity rises with the experience an individual acquires over time. On the other hand, productivity decreases with age because a person's physical capabilities deteriorate over time. Given that higher productivity increases the success chances of self-employment and thereby also the chance that someone will become self-employed, entry into self-employment becomes age dependent.

With respect to the educational level of the respondent, we find that the chance to enter self-employment is significantly larger for high and medium educational levels. This finding corresponds neither with findings in previous studies, which report no effect (see, e.g., de Wit and van Winden 1989; Dolton and Makepeace 1990; Taylor 1996), nor with the self-employments across educational levels as shown in table 4.2. An explanation for this result might be that we collapsed the CASMIN educational categories into three major categories. The coefficients for the educational dummies used show only that self-employment is more likely in the two upper levels compared with the low educational level. A finer distinction of educational levels would likely result in a much less obvious relation between education and self-employment.

The skill level of the previous occupation has no impact on the self-employment decision. Only people who are currently out of the labor force or are unemployed have a significantly lower chance of becoming self-employed. The relation between social class and entry into self-employment is ambiguous. On the one hand, higher-skilled people are more productive, and therefore more likely to succeed in self-employment because they can generate higher profits. Thus, one might expect that skill level is positively related to self-employment. On the other hand, higher-skilled people usually already occupy well-paid jobs, which often include the supervision of others. Employees supervising others have to start firms with employees to remain in the highest social class and therefore not only face higher startup costs, but also higher opportunity costs in terms of income and control losses. Thus, highly skilled people are less likely to become self-employed.

With respect to social background and environment, we look at the

respondent's father and spouse (if present). The coefficients of the father's status variables clearly show that the chance of becoming self-employed is positively related to the father's social class. People with a father who has been a professional or manager have significantly higher chances to enter self-employment. Whether the father himself has been self-employed has a positive significant effect, but this effect is smaller and less significant for entries since 1980 than for all entries. Surprisingly, in our study, the effect of father's self-employment is not as strong as in many previous studies (see, e.g., Blanchflower and Oswald 1998; Carroll and Mosakowski 1987; Lindh and Ohlsson 1996; Taylor 1996; de Wit and van Winden 1989). We estimated an additional model in which father's social class is not included. In this model the effect of father's self-employment is not significant, and even less than the effect in the model with controls for father's social class. The less significant coefficient for entries since 1980 suggests that in the Netherlands, the impact of father's self-employment has decreased due to changes in the social and economic structure (deregulation and growing importance of service sector). Apparently, becoming self-employed is facilitated by entrepreneurial values and attitudes transferred from a self-employed father, but it is facilitated even more by the higher levels of general human capital and wealth in the higher classes. The coefficients of the spouse effects indicate that not having a spouse, or having a self-employed spouse, significantly increases the chance to become self-employed. However, people who have a spouse with a paid job are not more likely to enter self-employment than people with a nonworking spouse. Thus, an additional secure income source from the spouse does not compensate for the higher income uncertainty of self-employment. The positive coefficients of the variables "spouse: self-employed" and "no spouse" point to other factors than the financial effect of the spouse. Self-employed without a spouse have in general fewer responsibilities, because they do not have to care for other dependent family members. Given the lower level of responsibility, they are better able to incur the risks of becoming self-employed. For self-employed spouses, we cannot distinguish whether the spouse has a separate business or is a partner in the respondent's business. Still, in both cases, a self-employed spouse is likely to support self-employment through shared values and attitudes.

We included four dummies for the previous industry of the respondent and used the manufacturing sector as a reference category. Thus, our industry dummies control for industry-specific experiences that influence one's possibility of becoming self-employed. For both samples, the coefficients of the variables of construction and traditional services are positive and significant, while the coefficients for business and other services are negative, but not significant. The positive effect of the construction

variable supports the notion that in the last two decades the economic organization of labor has changed in the construction industry, and construction employees have become increasingly self-employed. Employers in construction have shifted the risks associated with demand fluctuations and work disabilities to (solo) self-employed subcontractors. Limited promotion possibilities in the traditional service sector, and especially within restaurants and small shops, explain the positive coefficient for this sector. Finally, we included a control variable for the survey year, which is negative and significant for the sample with all entries. Thus, based on all entries, respondents of the 1998 survey are less likely to become self-employed. This significant coefficient is not caused by an age-related bias of our samples and may stem from problems with regard to measurement comparability.

The models of table 4.5 also include the general unemployment rate as a predictor of entry into self-employment, to account for the macroeconomic situation. The coefficient of the unemployment rate is not significant at all. This is not unexpected, since this effect is not very clear theoretically. On the one hand, a favorable economic climate might facilitate self-employment because firms realize higher profits more easily, and more opportunities for new businesses arise. On the other hand, the opportunity costs for self-employment rise as well, because in a booming economy, demand for labor increases, and consequently the offered wages and salaries rise.

In table 4.6 we distinguish two kinds of entry into self-employment: entry into self-employment in a professional or managerial occupation and in a skilled occupation. Due to the very few entries into unskilled self-employment (only twenty since 1980, and only forty-seven for all entries), it is not possible to estimate a model distinguishing all three kinds of entries. Applying a competing risk event-history model sheds some light on intergenerational and interpersonal patterns of social mobility. In the discussion of the results, we will focus on the effects of education, class of the respondent's occupation prior to self-employment, and father's class. We will also highlight differences between the two kinds of self-employment entry.

As reported in the previous analysis, education is related to entry into self-employment. People with an intermediate educational level are much more likely to enter skilled and professional self-employment. Furthermore, individuals who have obtained higher education choose self-employment in occupations of the professional class. None of the effects of the class associated with the previous occupation are significant, and all point in different directions. Thus, by and large, entry into self-employment in distinct classes is not influenced by the previous occupation and class. The mostly nonsignificant negative effects of the variable "ori-

TABLE 4.6
Effects on Entry into Professional/Managerial and Skilled Self-Employment in the Netherlands

	Entries since 1980		*All entries*	
	Professional/ managerial	*Skilled*	*Professional/ managerial*	*Skilled*
Respondent's characteristics				
Male	0.494*	0.078	0.666**	0.205
Age	0.160**	0.201**	0.136**	0.191**
Age (squared)	−0.005**	−0.006**	−0.004**	−0.006
Education: medium[a]	0.588~	0.712*	0.631**	0.664**
Education: high[a]	1.483**	−0.156	1.387**	−0.084
Origin: professional manager[b]	0.342	−0.551	−0.093	−0.290
Origin: skilled[b]	0.161	0.034	−0.207	0.473
Origin: unemployed/ not in labor force[b]	−0.344	−0.826~	−0.434	−0.455
Social background and environment				
Father professional/ manager[c]	0.261	0.742~	0.541*	0.465~
Father skilled[c]	−0.272	1.137**	−0.237	0.651**
Father self-employed	0.225	0.428~	0.515**	0.484**
Spouse: employed in paid labor[d]	0.369	−0.056	0.370	−0.136
Spouse: self-employed[d]	0.144	1.430*	0.804~	1.087*
No spouse[d]	0.582~	0.352	0.350	0.348
Industrial sector				
Construction[e]	0.744	1.251*	0.226	1.812**
Traditional services[e]	0.809*	1.137*	0.797**	1.765**
Business services[e]	−0.458	−0.516	−0.220	0.367
Other services[e]	−0.755*	0.150	−0.697*	0.833~
Business cycle				
Unemployment rate	−0.067	−0.023	−0.005	−0.013
Control variable				
Survey 1998	−0.030	−0.300	−0.185	−0.696**
Intercept	−8.288**	−9.139**	−8.482**	−9.374**
Number of events	118	76	177	132
Number of cases (persons * years)	50,231		85,032	

TABLE 4.6 (*continued*)

	Entries since 1980		*All entries*	
	Professional/ managerial	*Skilled*	*Professional/ managerial*	*Skilled*
−2 Log Likelihood	2,763		4,156	
Chi[2]	196.7		302.7	
Degrees of freedom[f]	50		50	

Source: Family Survey Dutch Population, 1992/93 and 1998.
[a] Reference category: low education
[b] Reference category: unskilled
[c] Reference category: unskilled
[d] Reference category: spouse no job
[e] Reference category: manufacturing industry
[f] The effects of indicator variables representing a missing value on respondent's education, skill level, father's skill level and self-employment, and industrial sector are included in the model but are not reported.
** $p < 0.01$ * $p < 0.05$ ~ $p < 0.10$

gin: unemployed / not in labor force" support the notion that people are not forced into self-employment because they would otherwise not be able to make a living. While the social class of the previous occupation does not restrict entry into self-employment, intergenerational mobility does play a role. Entry into self-employment is most likely to occur in the same class as the father's occupation. Respondents with a father in the skilled class are likely to enter skilled self-employment, and less likely to enter the professional class. Respondents with a father working in the class of professionals and managers have a significantly higher chance of entering self-employment in the professional class, but also in the skilled class.

With respect to the other variables, some differences between entry into skilled and professional self-employment come to light. In the overall analysis of entry into self-employment, we observed a significant positive effect of a self-employed spouse. Distinguishing two kinds of self-employment reveals that this effect is significant only for entry into skilled self-employment. Thus, individuals who enter skilled self-employment profit more from a self-employed spouse. The coefficient for the construction sector is also significant only for skilled self-employment. Apparently, people who had a paid job in construction predominantly became self-employed in the skilled class. This is further evidence for our thesis that the increased self-employment in construction is caused by structural changes in the construction industry, where former construction employees become self-employed subcontractors. Finally, we

observe that previous employment in other services slightly increases the chance of becoming self-employed in the skilled class but decreases the chance of becoming self-employed in the professional class. The composition of the sector is very heterogeneous (including government organizations as well as personal services, such as cleaning and hairdressing) and impedes a strong interpretation of the coefficients.

Exit from Self-Employment

Figure 4.2 shows Kaplan-Meier survival functions for exits from self-employment during the first ten years of self-employment, separately for exits from professional/managerial self-employment and for exits from skilled self-employment. There are too few exits from unskilled self-employment in the data to include them in this figure. The figure shows slight differences between exits from professional/managerial and exits from skilled self-employment spells, and it shows that most exits occur in the first few years. After ten years, about 30 percent of the self-employed in our retrospective life-course dataset have left self-employment. This is a low figure when compared with estimates from prospective panels, and it might be the result of underreporting of short self-employment spells or short episodes between two self-employment spells.

Now we turn to movements out of self-employment. The first model in table 4.7 shows the results for exits of those who entered self-employment between 1980 and 1998; the second model, for all observed exits. A glance at the table shows that exits from self-employment are less well explained by our determinants on the micro level than entries to self-employment. In the first model, no coefficients are significant, with the exception of age effects. Therefore, the following discussion focuses on the model for all entries. The effects of the age variables show a U-shaped relationship between age and exit. Experience accumulated over one's lifetime reduces the failure chances of new businesses. The significant positive effect of the quadratic term can be ascribed to the elderly who exit the labor force and retire early. Furthermore, we observe that people who are self-employed without having employees are more likely to leave self-employment. This result coincides with results from firm survival studies, which find a positive relationship between firm size and survival. The educational level and the skill level of the self-employed have no effects on exit.

With respect to a respondent's social background, only father's self-employment is negatively related to exit. The intergenerational transfer of entrepreneurial skills from the father to his offspring furnishes the self-employed with abilities that facilitate survival in self-employment. We have seen that father's social class is positively related to entry, but

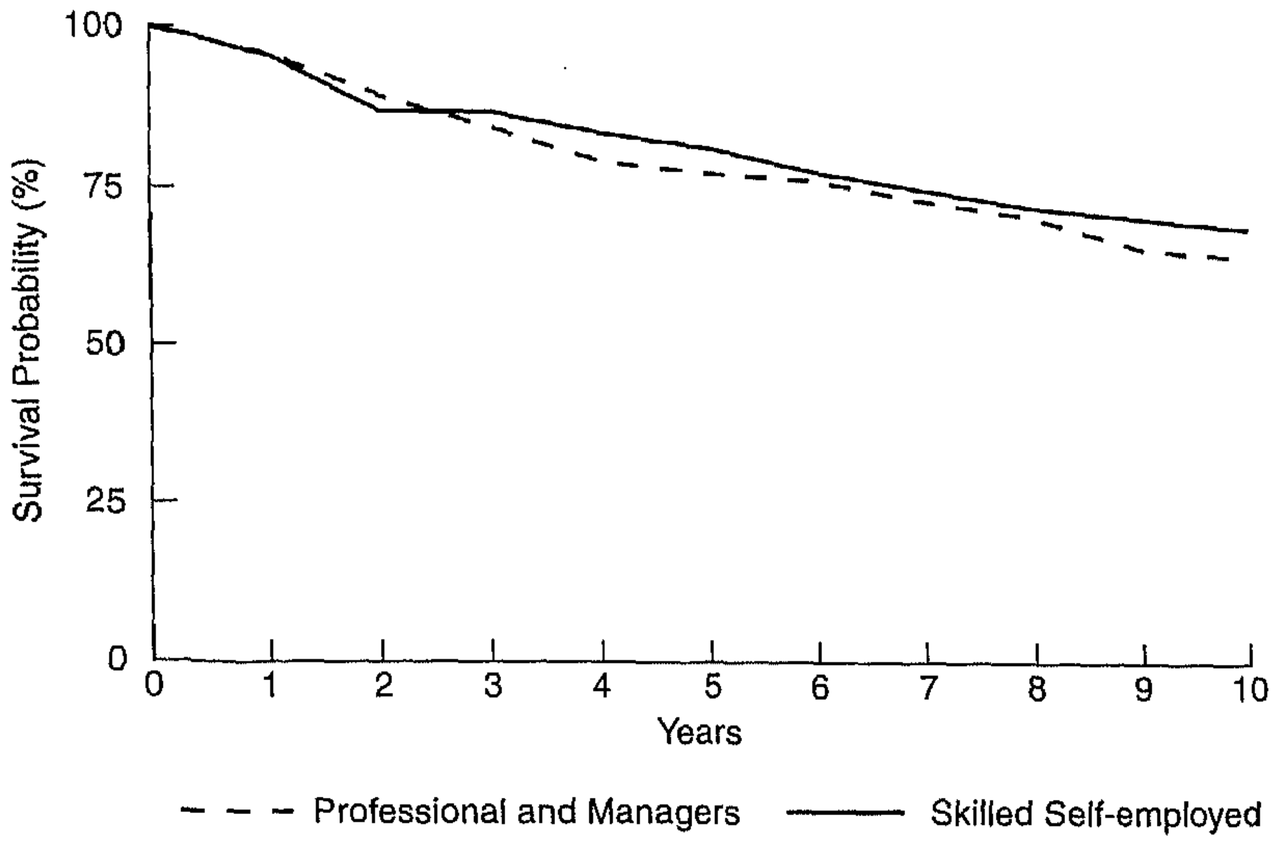

Figure 4.2: Kaplan-Meier Function for Survival in Self-Employment, for Professionals/Managers and for Skilled Self-Employed in the Netherlands

we now observe that it has no effect on exit. This suggests that the financial capital of fathers in the professional class is more important than their human or social capital. Wealthy fathers can support entry into self-employment by providing necessary starting capital but are unable or unlikely to sponsor an unprofitable business permanently. If the human and social capital acquired from a father in a higher class facilitated self-employment, one would expect a lasting effect of these forms of capital, and consequently negative effects on exit. Analogous to the entry analysis, only a self-employed spouse has an effect in our exit analysis.

None of the industry dummies is significant, although the dummy for the traditional service industry is on the edge of significance ($p = 0.120$). In the descriptive section on self-employment in the Netherlands, we illustrated the changes in self-employment in different sectors. These dynamics in self-employment are caused mainly by increased entries into specific sectors, and less by exits. It should be noted that agricultural self-employment is not considered in the current analysis. Macroeconomic conditions did not have an influence on the entry decision but do influence exit, at least when all entries (before and after 1980) are analyzed simultaneously. In unfavorable economic conditions (i.e., a high unemployment rate), more self-employed are forced to give up. These findings suggest that exit is not necessarily an autonomous decision of the self-employed, but that market forces urge people to leave self-employment.

TABLE 4.7
Effects on Exit from Self-Employment in the Netherlands

	Exits since 1980	*All exits*
Respondent's characteristics		
Male	−0.322	−0.180~
Age	−0.128**	−0.130**
Age (squared)	0.002*	0.002**
Education: medium[a]	−0.345	−0.264
Education: high[a]	−0.049	−0.020
Origin: professional manager[b]	0.122	−0.016
Origin: skilled[b]	−0.028	−0.204
Origin: solo self-employment	0.111	0.354~
Social background and environment		
Father professional/manager[c]	0.419	0.120
Father skilled[c]	0.363	0.141
Father self-employed	−0.260	−0.327~
Spouse: employed in paid labor[d]	−0.357	−0.338
Spouse: self-employed[d]	−0.791	−0.214
No spouse[d]	0.029	0.074
Industrial sector		
Construction[e]	−0.705	−0.261
Traditional services[e]	0.489	0.517
Business services[e]	−0.227	−0.217
Other services[e]	−0.032	0.240
Business cycle		
Unemployment rate	0.014	0.049~
Control variable		
Survey 1998	−0.279	−0.266
Intercept	−1.498	−1.943**
Number of events	105	160
Number of cases (persons * years)	2,170	3,357
−2 Log Likelihood	797	1,217
Chi^2	44.0	69.0
Degrees of freedom[f]	26	26

Source: Family Survey Dutch Population 1992/93 and 1998

[a] Reference category: low education

[b] Reference category: unskilled

[c] Reference category: unskilled

[d] Reference category: spouse no job

[e] Reference category: manufacturing industry

[f] The effects of indicator variables representing a missing value on respondent's education, skill level, father's skill level and self-employment, industrial sector, and solo self-employment are included in the model but are not reported.

** $p < 0.01$ * $p < 0.05$ ~ $p < 0.10$.

The Effects of Personality on Entry and Exit

The survey in 1998 included information on the so-called big-five personality traits (Digman 1990) of the respondent. In psychological research, it has been suggested that entrepreneurship is related to specific personal characteristics, such as need for achievement, locus of control and risk attitude. However, it should be noted that empirical evidence on the relationship between personality traits and entrepreneurship is weak and inconsistent (Miner 1997). In table 4.8 we present the effects of these big-five personality traits on self-employment entry and exit. These effects stem from models in which all predictor variables of the previous models are included. Interestingly, the variable for openness and creativity and the variable for conscientiousness have significant effects on the chance of becoming self-employed. The positive effect of openness and creativity is in line with the well-known description of Schumpeter's entrepreneur. According to Schumpeter (1950), an entrepreneur is an innovator and creator whose activities initiate and cause dynamics in an economy. The negative coefficient of conscientiousness indicates that precision and carefulness are personal characteristics not conducive to self-employment. This finding suggests that people who quickly decide on the basis of some rough information are more likely to become self-employed. We do not find any effects of personality on exit from self-employment.

TABLE 4.8
Effects of Personality Traits on Entry into and Exit from Self-Employment in the Netherlands[a]

Personality trait	*All entries*	*All exits*
Extraversion	0.135	0.029
Agreeableness	−0.176	−0.273
Conscientiousness	−0.284**	−0.031
Stability	0.060	−0.015
Openness	0.382**	−0.010
Number of events	158	59
Number of cases (persons * years)	45,323	1,318
−2 Log Likelihood	1984	450
Chi^2	119.5	32.3
Degrees of freedom[b]	29	28

Source: Family Survey Dutch Population, 1998
[a] All effects from tables 4.5 and 4.7 are included in the models.
[b] Degrees of freedom are not consistent due to empty missing value indicators.
** $p < 0.01$ * $p < 0.05$

Conclusions

The landscape self-employment in the Netherlands has changed over the last two decades. Since 1990, overall self-employment has risen from a low point of 8 percent to the current rate of 10 percent, but we can observe considerable differences. Sectors that have known traditionally high rates of self-employment (retail, hotels, and restaurants) show declining rates of self-employment and are outrun in absolute and relative numbers by the sectors of business services and construction for both genders, and the sector of other services for women. Thus, the general shift from an industrial economy to a service economy is also reflected in Dutch self-employment. Self-employment in distinct social classes has been the focus of this paper. Such a distinction among the self-employed reveals some interesting results. While self-employment among male and female skilled people has remained rather constant between 1985 and 1997, self-employment rose considerably among unskilled as well as professional/managerial people in this period. Although a deeper investigation of this polarization is beyond the scope of this paper, it is clear that the parallels of this result and recent discussions about the shifting of risks from the society back to the individual are deceptive. At the upper end of the societal ladder, those who possess the necessary resources to bear additional risks are willing to take them, and have the chance to achieve higher profits. Further down this ladder, unskilled people—especially women—might have to bear risks such as no social security and no payment during sickness, because the regular labor market has no job openings for these kinds of work.

In this study we investigated self-employment in the Netherlands between 1980 and 1998 on a micro level. We considered in particular social mobility issues, which have been neglected by other studies on entry into self-employment in the Netherlands (de Wit and van Winden 1989; Blumberg and Pfann 2001). Our results show that the impact of social background differs if the self-employment of different social classes is distinguished. As is known from general stratification studies, intergenerational mobility is also an issue among the self-employed. Self-employment is most likely to occur in the same class the father belongs to. Our analysis shows clearly that self-employment is not a route for upward social mobility. Contrarily, we observe that self-employment in the skilled class is often entered by people with a father in the professional class. Furthermore, we find evidence that a self-employed father increases the chance of entering self-employment, although this effect is less apparent for entries since 1980. Entering self-employment also does not promote improving one's class position with respect to one's previous

job. Overall, we do not find any relation between class of previous job and class of self-employment. However, when we look at the effects of education, we find that people with a medium educational level have increased chances to enter skilled and professional/managerial self-employment. This finding suggests that self-employment allows those individuals to exploit valuable capabilities that are not honored or recognized by the educational system or the paid labor market. People who obtain higher education usually enter professional/managerial self-employment and are less likely to enter skilled self-employment.

We were much better able to explain entry into self-employment than exit. Exit from self-employment seems to be less determined by the considered characteristics of a self-employed individual. The significant effects of solo self-employment and the national unemployment rate in our exit analysis suggest that factors related to the firm and the macroeconomic environment are more relevant determinants of exit. This also suggests that the invisible hand of the market mechanism is able to sort out unsuccessful business owners, but not to detect promising entrepreneurs. However, it should be noted that we were not able to distinguish voluntary exits (e.g., selling of the firm or switching to better opportunity in the paid labor market) and forced exits (e.g., unprofitable business or even bankruptcy). One would expect voluntary exits to be more related to the characteristics of the respondent, and forced exits to the characteristics of the firm and macroeconomic conditions.

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